

PATENT Docket No. **COS01001**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:))
Paul T. SCHULTZ et al.)
Application No.: 09/887,804) Group Art Unit: 3621
Filed: June 22, 2001) Examiner: P. Elisca
For: A SYSTEM AND METHOD FOR MULTI-MODAL AUTHENTICATION USING SPEAKER VERIFICATION)))))))

U.S. Patent and Trademark Office Customer Window, Mail Stop **Appeal Brief - Patents** Randolph Building 401 Dulany Street Alexandria, Virginia 22314

SUPPLEMENTAL APPEAL BRIEF

This Supplemental Appeal Brief is submitted to provide claims 7 and 8 in Claim Appendix IX and is in response to a Notification of Non-Compliant Appeal Brief from the U.S. Patent and Trademark Office dated October 27, 2005.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is MCI, Inc.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

Appellants are unaware of any related appeals, interferences or judicial proceedings.

III. STATUS OF CLAIMS

Claims 1-68 are pending in this application.

Claims 1-6 and 9-68 were finally rejected in the Office Action, dated March 31, 2005, and are the subject of the present appeal. These claims are reproduced in the Claim Appendix of this Appeal Brief.

IV. STATUS OF AMENDMENTS

A Request for Reconsideration was filed subsequent to the final Office Action, dated March 31, 2005. An Advisory Action, dated May 27, 2005, indicated that the Request for Reconsideration was not persuasive.

V. SUMMARY OF CLAIMED SUBJECT MATTER

In the paragraphs that follow, each of the independent claims that is involved in this appeal and each dependent claim that is argued separately that is in means plus function or step plus function format will be recited followed in parenthesis by examples of where support can be found in the specification and drawings.

Claim 1 recites a computerized method for authenticating an electronic transaction between a user and a computer, the computer being configured to conduct electronic transactions (e.g., Fig. 2; pg. 6, lines 1-4), the method comprising: receiving a computer-generated transaction

identifier from the computer via an electronic data link (e.g., Figs. 2 and 5; pg. 10, lines 21-22; pg. 13, lines 7-8); receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection (e.g., Figs. 2 and 5; pg. 11, lines 2-3; pg. 13, lines 10-12); comparing the user-spoken transaction identifier with the computer transaction identifier (e.g., Figs. 2 and 5; pg. 11, lines 5-7; pg. 13, lines 12-14); comparing the user-spoken verification identifier with a voice print of the user (e.g., Figs. 2 and 5; pg. 11, lines 5-7; pg. 13, lines 14-15); and transmitting an authentication message to the computer if the user-spoken transaction identifier matches the computer-generated transaction identifier and if the user-spoken verification identifier matches the voice print (e.g., Figs. 2 and 5; pg. 11, lines 5-7; pg. 13, lines 15-18).

Claim 27 recites a system (e.g., 100, Fig. 2) for authenticating an electronic transaction between a first user-operated device (e.g., 44, Fig. 2) and a computer (e.g., 50, Fig. 2), the computer being configured to conduct electronic transactions (e.g., pg. 6, lines 1-4). The system (e.g., 100, Fig. 2) comprises a voice browser (e.g., 20, Fig. 2) configured to receive and process user-spoken information from a second user-operated device (e.g., 42, Fig. 2), the voice browser being programmed to compare a user-spoken transaction identifier to a computer generated transaction identifier, and to compare a user-spoken verification identifier to a voice print of the user (e.g., Figs. 2 and 5; pg. 11, lines 2-7; pg. 13, lines 10-15); and a session correlator (e.g., 30, Fig. 2) coupled to the voice browser, the session correlator being configured to transmit an authentication message to the computer if the user-spoken transaction identifier matches the computer transaction identifier, and if the user-spoken verification identifier matches the voice print (e.g., Figs. 2 and 5; pg. 11, lines 5-7; pg. 13, lines 15-18).

Claim 63 recites a computerized voice verification method for authenticating an electronic transaction between a user (e.g., 40, Fig. 2) and a computer (e.g., 50, Fig. 2), the computer being configured to conduct electronic transactions (e.g., pg. 6, lines 1-4). The method comprises enrolling the user in a voice verification system, whereby the user provides the system with a user voice print (e.g., \$500, Fig. 5; pg. 12, lines 18-21); performing the electronic transaction (e.g., S502, Fig. 5; pg. 13, lines 5-7); receiving a transaction identifier from the computer via an electronic data link in response to performing the electronic transaction (e.g., S504, Fig. 5; pg. 13, lines 7-8); receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection (e.g., S510, Fig. 5; pg. 13, lines 10-12); comparing the user-spoken transaction identifier with the computer transaction identifier and the user-spoken verification identifier with a voice print of the user (e.g., S512, Fig. 5; pg. 13, lines 12-15); and transmitting an authentication message to the computer if the user-spoken transaction identifier matches the computer transaction identifier, and if the userspoken verification identifier matches the voice print (e.g., S514, 516, Fig. 5; pg. 13, lines 15-17).

Claim 65 recites a computerized method for controlling web-site navigation. The method comprises providing an authentication system (e.g., 20, 30, Fig. 1) including a voice recognition unit (e.g., 210, Fig. 1) and a session correlator (e.g., 304, Fig. 1), the voice recognition unit having access to a pre-registered voice print of the user (e.g., 204, Fig. 1), whereby the authentication system is coupled to a user computer and a web-site during the computerized method (e.g., Fig. 1; pg. 6, line 21, to pg. 7, line 8); conducting a transaction between the user computer and the web-site, the web-site transmitting a transaction identifier to the user computer

and the authentication system in response to the transaction (e.g., S504, Fig. 5; S600, Fig. 6; pg. 13, lines 7-8); receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, the authentication system being programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print (e.g., S510, S512, Fig. 5; S600, Fig. 6; pg. 13, lines 10-15); transmitting an authentication message to the web-site if the user-spoken transaction identifier matches the transaction identifier and if the user-spoken verification identifier matches the voice print (e.g., S514, 516, Fig. 5; S600, Fig. 6; pg. 13, lines 15-17); receiving at least one user-spoken command for controlling web-site navigation, the authentication system being programmed to convert the at least one user-spoken command into at least one computerreadable command (e.g., S602, S604, S606, Fig. 6; pg. 13, line 21, to pg. 14, line 3); and transmitting the at least one computer-readable command to the web-site, the at least one computer-readable command being executed by the web-site, whereby the user controls web-site navigation of the web-site by the at least one user-spoken command (e.g., S608, Fig. 6; pg. 14, lines 3-6).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-6 and 9-68 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hoffman et al. (U.S. Patent No. 6,397,198) in view of Fromm (U.S. Patent No. 6,266,640).

VII. ARGUMENTS

A. The rejection under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> (U.S. Patent No. 6,397,198) in view of <u>Fromm</u> (U.S. Patent No. 6,266,640) should be reversed.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention always rests upon the Examiner. <u>In re Oetiker</u>, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner must provide a factual basis to support the conclusion of obviousness. <u>In re Warner</u>, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by <u>Graham v. John Deere Co.</u>, 86 S.Ct. 684, 383 U.S. 1, 148 USPQ 459 (1966). The Examiner is also required to explain how and why one having ordinary skill in the art would have been realistically motivated to modify an applied reference and/or combine applied references to arrive at the claimed invention. <u>Uniroyal, Inc. v. Rudkin-Wiley Corp.</u>, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

In establishing the requisite motivation, it has been consistently held that the requisite motivation to support the conclusion of obviousness is not an abstract concept, but must stem from the prior art as a whole to impel one having ordinary skill in the art to modify a reference or to combine references with a reasonable expectation of successfully achieving some particular realistic objective. See, for example, Interconnect Planning Corp. v. Feil, 227 USPQ 543 (Fed. Cir. 1985). Consistent legal precedent admonishes against the indiscriminate combination of prior art references. Carella v. Starlight Archery, 804 F.2d 135, 231 USPQ 644 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985).

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1. Claims 1-3, 6, 9-15, 18, 22-26, 63, and 64.

Appellants' claim 1 is directed to a computerized method for authenticating an electronic transaction between a user and a computer, where the computer is configured to conduct electronic transactions. The method includes receiving a computer-generated transaction identifier from the computer via an electronic data link; receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection; comparing the user-spoken transaction identifier with the computer transaction identifier; comparing the user-spoken verification identifier with a voice print of the user; and transmitting an authentication message to the computer if the user-spoken transaction identifier matches the computer-generated transaction identifier and if the user-spoken verification identifier matches the voice print. Hoffman et al. and Fromm, whether taken alone or in any reasonable combination, do not disclose or suggest this combination of features.

For example, <u>Hoffman et al.</u> and <u>Fromm</u> do not disclose receiving a computer-generated transaction identifier from the computer via an electronic data link. The Examiner relies on lines 1-7 of the Abstract, and col. 2, lines 38-59, of <u>Hoffman et al.</u> for allegedly disclosing this feature (final Office Action, pg. 3). Appellants submit that these sections of <u>Hoffman et al.</u> do not disclose or suggest the above feature of claim 1.

In the Abstract, at lines 1-7, Hoffman et al. discloses:

The invention discloses a tokenless biometric identification computer system, comprising at least a database containing registered biometric samples of users. A comparator compares a bid biometric sample of a user to at least one registered biometric sample, the bid biometric sample obtained directly from the user during an identification process for conducting an electronic transaction by the user.

This section of Hoffman et al. merely discloses that a bid biometric sample of a user is compared

to at least one registered biometric sample. This section of <u>Hoffman et al.</u> does not disclose or suggest receiving a computer-generated transaction identifier from the computer via an electronic data link, as recited in claim 1. <u>Hoffman et al.</u> in no way discloses or suggests that a bid biometric sample or a registered biometric sample is a computer-generated transaction identifier.

At col. 2, lines 38-59, Hoffman et al. discloses:

The invention discloses a tokenless biometric identification computer system comprising at least a database containing registered biometric samples of users. A comparator compares a bid biometric sample of a user to at least one registered biometric sample wherein the bid biometric sample is obtained directly from the user during an identification process for conducting an electronic transaction by the user. An audio signature is associated with a transaction processor entity and is stored in the computer system, where the transaction processor entity is responsible for conducting the electronic transaction. A sound generator generates an analog or digital signal from the stored audio signature, and a transducer converts the analog or digital signal to a play back audio signature. This invention generates a play back audio signature from the stored audio signature that is associated with the transaction processor entity and the play back audio signature is played back to the user to identify the transaction processor entity that conducted the electronic transaction. This system operates without any man made personal devices such as credit cards, identity cards or the like is used during the identification process for conducting the electronic transaction.

This section of <u>Hoffman et al.</u> discloses that a bid biometric sample of a user is compared to at least one registered biometric sample. This section of <u>Hoffman et al.</u> also discloses that a previously stored audio signature relating to the payee may be played for the user. This section of <u>Hoffman et al.</u> does not disclose or suggest receiving a computer-generated transaction identifier from the computer via an electronic data link, as recited in claim 1.

<u>Hoffman et al.</u> and <u>Fromm</u> do not further disclose receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection, as also recited in claim 1. The Examiner appears to admit that <u>Hoffman et al.</u> does not disclose this feature and relies on <u>Fromm</u> for allegedly disclosing "a technique for verifying a user's voice

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prior or the user's identity by use of a voice print before allowing the user to engage in commercial transactions" and points to the Abstract, col. 1, lines 55-67, col. 3, lines 1-52, and col. 4, lines 26-49, of Fromm for support (final Office Action, pp. 3 and 5). Appellants respectfully submit that these sections of Fromm do not disclose or suggest the above feature of claim 1.

In the Abstract, Fromm discloses:

A technique for verifying a user's voice prior to permitting the user to conduct a business transaction over a data network. An order is received via the data network, and a voice verification unit is contacted to (i) access a prestored voice print, (ii) obtain a present voice sample from the consumer desiring the transaction and compare said present voice sample to the prestored voice sample, and (iii) issue a signal indicating whether the voice correctly verifies.

This section of Fromm discloses comparing a present voice sample to a prestored voice print. This section of Fromm in no way discloses or suggests receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection, as recited in claim 1. Fromm does not disclose or suggest that the present voice sample is a userspoken transaction identifier. In fact, this section of Fromm does not disclose or suggest a transaction identifier. Fromm's present voice sample could arguably correspond to a user-spoken verification identifier, but not to both a user-spoken verification identifier and a user-spoken transaction identifier, as recited in claim 1.

At col. 1, line 55, to col. 2, line 2, Fromm discloses:

The above and other problems of the prior art are overcome in accordance with the present invention which relates to a technique of verifying the user's identity by use of a voice print before allowing the user to engage in commercial transactions over the data network. In accordance with one embodiment of the invention, a voice verification unit is connected to the data network. The user's ID is ascertained by means of, for example, his data network address, and his stored voice print is retrieved from a voice print bank. The user is then asked to speak a

few words, in order to verify the user's identity. The verification of the user's speech pattern may take place with the aid of a separate telephone call initiated by either the voice verification unit or the user's computer and/or telephone, or by the computer accepting and processing the transaction.

This section of <u>Fromm</u> discloses that a voice verification unit uses a stored voice print to identify a user. This section of <u>Fromm</u> in no way discloses or suggests receiving <u>a user-spoken</u> transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection, as recited in claim 1. <u>Fromm</u> does not disclose or suggest that the few words that the user is asked to speak is a user-spoken transaction identifier. In fact, this section of <u>Fromm</u> does not disclose or suggest a transaction identifier.

At col. 3, lines 1-52, <u>Fromm</u> discloses that a present voice sample is obtained from a user by prompting the user to speak particular words, such as the user's password. This section of <u>Fromm</u> in no way discloses or suggests receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection, as recited in claim 1.

At col. 4, lines 26-49, Fromm discloses:

Alternatively, rather than having the voice sample taken at computer 105c, computer 105c could transmit the message to computer 105a while at the same time transmitting, via data network 109, the transaction ID to the voice verification unit 103. The voice verification unit 103 would then receive the toll free telephone call, or may receive the voice sample from the data network 101, from the user. Of course, the voice verification unit 103 could place the call as well. Voice verification unit 103 may then verify the voice received. Voice verification unit 103 could then send the approval with the transaction ID or data network logical address back to computer 105c.

In any of the above cases, subsequent to the voice sample being received from the consumer, block 205 transmits the appropriate information from computer 105c to voice verification unit 103. The information may include the transaction entered by the user during a telephone call, as well as the voice sample. Alternatively, if the voice sample was received directly at the voice verification unit 103, then the record would include only the transaction ID so that the voice verification unit

could match the transaction ID received from the user with that generated by computer 105c.

This section of <u>Fromm</u> discloses a transaction identifier (ID) that is used as part of the voice verification process. More specifically, <u>Fromm</u> discloses that the transaction ID is used to pair the voice sample entered at the time of the transaction with the prestored voice sample. This section of <u>Fromm</u> in no way discloses or suggests receiving <u>a user-spoken transaction identifier</u> and a user-spoken verification identifier <u>transmitted by the user via a voice connection</u>, as recited in claim 1.

Since <u>Hoffman et al.</u> and <u>Fromm</u> do not disclose receiving a computer-generated transaction identifier from the computer via an electronic data link or receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection, <u>Hoffman et al.</u> and <u>Fromm</u> cannot disclose comparing the user-spoken transaction identifier with the computer transaction identifier, as also recited in claim 1. The Examiner admits that Hoffman et al. does not disclose this feature and relies on the Abstract, col. 1, lines 55-67, col. 3, lines 1-52, and col. 4, lines 26-49, of <u>Fromm</u> for allegedly disclosing this feature (final Office Action, pp. 3 and 5). Appellants respectfully submit that these sections of <u>Fromm</u> do not disclose or suggest the above feature of claim 1.

The Abstract of <u>Fromm</u> is reproduced above. This section of <u>Fromm</u> discloses comparing a present voice sample to a prestored voice print. This section of <u>Fromm</u> in no way discloses or suggests comparing a <u>user-spoken transaction</u> identifier with a <u>computer transaction identifier</u>, as recited in claim 1. <u>Fromm</u> does not disclose or suggest that the present voice sample is a user-spoken transaction identifier. In fact, this section of <u>Fromm</u> does not disclose or suggest a transaction identifier.

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Col. 1, line 55, to col. 2, line 2, of <u>Fromm</u> is reproduced above. This section of <u>Fromm</u> discloses that a voice verification unit uses a stored voice print to identify a user. This section of Fromm in no way discloses or suggests comparing a user-spoken transaction identifier with a computer transaction identifier, as recited in claim 1. Fromm does not disclose or suggest that the few words that the user is asked to speak is a user-spoken transaction identifier. In fact, this section of Fromm does not disclose or suggest a transaction identifier.

At col. 3, lines 1-52, Fromm discloses that a present voice sample is obtained from a user by prompting the user to speak particular words, such as the user's password. This section of Fromm in no way discloses or suggests comparing a user-spoken transaction identifier with a computer transaction identifier, as recited in claim 1.

Col. 4, lines 26-49, of Fromm is reproduced above. This section of Fromm discloses a transaction identifier (ID) that is used as part of the voice verification process. More specifically, Fromm discloses that the transaction ID is used to pair the voice sample entered at the time of the transaction with the prestored voice sample. This section of Fromm in no way discloses or suggests comparing a user-spoken transaction identifier with a computer transaction identifier, as recited in claim 1.

Even assuming, for the sake of argument, that the above sections of Fromm could reasonably be alleged to disclose receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection and comparing the userspoken transaction identifier with the computer transaction identifier (points that Appellants do not concede), Appellants submit that one skilled in the art would not have been motivated to modify the system in Hoffman et al. to include these features, absent impermissible hindsight.

With respect to motivation, the Examiner alleges "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Hoffman's teaching by include the limitation detailed above as taught by Fromm because this would verify voice sample against a previously store voice print prior to allowing the transaction" (final Office Action, pp. 3-4).

The Examiner's motivation falls short of establishing a *prima facie* case of obviousness. The Examiner does not explain why one would seek to modify the Hoffman et al. system to include this alleged features of Fromm. Instead, the Examiner merely alleges that one would seek to incorporate Fromm's alleged teaching of receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection and comparing the user-spoken transaction identifier with the computer transaction identifier into the Hoffman et al. system to allow the Hoffman et al. system to verify voice sample against a previously stored voice print prior to allowing a transaction.

Hoffman et al. specifically discloses the verification of a user prior to a transaction by comparing a bid biometric sample from the user to a stored bid biometric sample (see, for example, col. 2, lines 38-45). Hoffman et al. further discloses that the biometric sample includes a finger image, an iris scan, or a facial scan (see, for example, col. 5, lines 5-9). The Examiner's motivation does not explain why one would seek to modify the very operation of the Hoffman et al. system to include the ability to perform voice verification.

Appellants submit that the motivation to combine <u>Hoffman et al.</u> and <u>Fromm</u> is based on impermissible hindsight.

For at least the foregoing reasons, Appellants submit that the rejection of claim 1 under

35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

Claims 2, 3, 6, 9-15, 18, and 22-26 depend from claim 1. Therefore, these claims are patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1.

2. Claim 4.

Claim 4 depends from claim 1. Therefore, claim 4 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1. Moreover, claim 4 recites an additional feature that is not disclosed or suggested by Hoffman et al. and Fromm.

Claim 4 recites that the user voice print is provided by the user by providing a spoken telephone number to a voice recognition unit. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 4.

Further, <u>Hoffman et al.</u> and <u>Fromm</u> do not disclose or suggest that a user voice print is provided by the user by providing a spoken telephone number to a voice recognition unit. In fact, <u>Hoffman et al.</u> does not even disclose a spoken telephone number. <u>Fromm</u> discloses that the voice print includes predetermined words, such as a password (col.3, lines 33-41). <u>Fromm</u> does not disclose or suggest, however, that the voice print is provided by the user providing a spoken telephone number to a voice recognition unit, as recited in claim 4.

For at least the foregoing reasons, Appellants submit that the rejection of claim 4 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

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3. Claim 5.

Claim 5 depends from claim 1. Therefore, claim 5 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1. Moreover, claim 5 recites an additional feature that is not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 5 recites that the user voice print is provided by the user by providing a spoken user name to a voice recognition unit. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 5.

Further, <u>Hoffman et al.</u> and <u>Fromm</u> do not disclose or suggest that the user voice print is provided by the user by providing a user name to a voice recognition unit. In fact, <u>Hoffman et al.</u> does not even disclose a spoken user name. <u>Fromm</u> discloses that the voice print includes predetermined words, such as a password (col.3, lines 33-41). <u>Fromm</u> does not disclose or suggest, however, that the voice print is provided by the user providing a spoken user name to a voice recognition unit, as recited in claim 5.

For at least the foregoing reasons, Appellants submit that the rejection of claim 5 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

4. Claim 16.

Claim 16 depends from claim 1. Therefore, claim 16 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1. Moreover, claim 16 recites an additional feature that is not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 16 recites that the user conducts the electronic transaction using a wireless device.

The Examiner does not address this feature in the final Office Action. Accordingly, a *prima* facie case of obviousness has not been established with respect to claim 16.

Further, <u>Hoffman et al.</u> and <u>Fromm</u> do not disclose or suggest a wireless device.

Therefore, <u>Hoffman et al.</u> and <u>Fromm</u> cannot disclose or suggest that the user conducts the electronic transaction using a wireless device, as recited in claim 16.

For at least the foregoing reasons, Appellants submit that the rejection of claim 16 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

5. Claim 17.

Claim 17 depends from claim 1. Therefore, claim 17 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1. Moreover, claim 17 recites an additional feature that is not disclosed or suggested by Hoffman et al. and Fromm.

Claim 17 recites that the user conducts the electronic transaction using a hand-held device. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 17.

Hoffman et al. and Fromm do not disclose or suggest a hand-held device. Therefore, Hoffman et al. and Fromm cannot disclose or suggest that the user conducts the electronic transaction using a hand-held device, as recited in claim 17.

For at least the foregoing reasons, Appellants submit that the rejection of claim 17 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

6. Claim 19.

Claim 19 depends from claim 1. Therefore, claim 19 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1. Moreover, claim 19 recites additional features that are not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 19 recites receiving at least one user-spoken command for controlling web-site navigation, where the at least one user-spoken command is transmitted by the user via a telephonic voice connection; converting the at least one user-spoken command into at least one computer-readable command; transmitting the at least one computer-readable command to the computer; and executing the at least one computer-readable command, using the computer, whereby the user controls web-site navigation of the Internet web-site by voice command via the telephonic voice connection. Hoffman et al. and Fromm, whether taken alone or in any reasonable combination, do not disclose or suggest these features.

The Examiner does not address these features in the final Office Action. Accordingly, a prima facie case of obviousness has not been established with respect to claim 19.

Further, <u>Hoffman et al.</u> and <u>Fromm</u> in no way disclose or suggest receiving at least one user-spoken command for controlling web-site navigation, where the at least one user-spoken command is transmitted by the user via a telephonic voice connection; converting the at least one user-spoken command into at least one computer-readable command; transmitting the at least one computer-readable command to the computer; and executing the at least one computer-readable command, using the computer, whereby the user controls web-site navigation of the Internet web-site by voice command via the telephonic voice connection, as recited in claim 19.

For at least the foregoing reasons, Appellants submit that the rejection of claim 19 under

35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

7. Claim 20.

Claim 20 depends from claim 19. Therefore, claim 20 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 19. Moreover, claim 20 recites an additional feature that is not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 20 recites that the user is prompted by a voice menu system to respond to voice menu options when transmitting the at least one user-spoken command. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 20.

<u>Hoffman et al.</u> and <u>Fromm</u> in no way disclose or suggest that the user is prompted by a voice menu system to respond to voice menu options when transmitting the at least one user-spoken command, as recited in claim 20.

For at least the foregoing reasons, Appellants submit that the rejection of claim 20 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

8. Claim 21.

Claim 21 depends from claim 1. Therefore, claim 21 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 1. Moreover, claim 21 recites additional features that are not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 21 recites providing at least one voice menu option to the user; processing at least one user-spoken response to the at least one voice menu option, whereby the at least one user-

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spoken response is transformed into at least one computer-readable response; transmitting the at least one computer-readable response to the computer; and executing the at least one computer response, using the computer, whereby the user controls the computer by voice command. The Examiner does not address these features in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 21.

Further, <u>Hoffman et al.</u> and <u>Fromm</u> in no way relate to a user controlling a computer by voice command. Therefore, <u>Hoffman et al.</u> and <u>Fromm</u> cannot disclose or suggest providing at least one voice menu option to the user; processing at least one user-spoken response to the at least one voice menu option, whereby the at least one user-spoken response is transformed into at least one computer-readable response; transmitting the at least one computer-readable response to the computer; and executing the at least one computer response, using the computer, whereby the user controls the computer by voice command, as recited in claim 21.

For at least the foregoing reasons, Appellants submit that the rejection of claim 21 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

9. Claims 27, 28, and 32-62.

Independent claim 27 is directed to a system for authenticating an electronic transaction between a first user-operated device and a computer, where the computer is configured to conduct electronic transactions. The system includes a voice browser configured to receive and process user-spoken information from a second user-operated device, the voice browser being programmed to compare a user-spoken transaction identifier to a computer generated transaction identifier, and to compare a user-spoken verification identifier to a voice print of the user; and a

session correlator coupled to the voice browser, the session correlator being configured to transmit an authentication message to the computer if the user-spoken transaction identifier matches the computer transaction identifier, and if the user-spoken verification identifier matches the voice print. Hoffman et al. and Fromm do not disclose or suggest this combination of features.

The Examiner does not specifically address this claim in the final Office Action. Instead, the Examiner addresses the features recited in claim 1 (see pages 2-4 of the final Office Action). Claim 1, however, does not recite a system for <u>authenticating an electronic transaction between a first user-operated device and a computer</u>, where the system includes <u>a voice browser</u> configured to receive and process user-spoken information <u>from a second user-operated device</u>, where the voice browser is programmed to compare a user-spoken transaction identifier to a computer generated transaction identifier, and to compare a user-spoken verification identifier to a voice print of the user. Since the Examiner did not specifically address the above features of claim 27, a *prima facie* case of obviousness has not been established with respect to claim 27.

Nonetheless, Appellants submit that <u>Hoffman et al.</u> and <u>Fromm</u>, whether taken alone or in any reasonable combination, do not disclose or suggest a voice browser configured to receive and process user-spoken information from a second user-operated device, where the voice browser is programmed to compare a user-spoken transaction identifier to a computer generated transaction identifier, and to compare a user-spoken verification identifier to a voice print of the user, as recited in claim 27. The Examiner appears to admit that <u>Hoffman et al.</u> does not disclose comparing a user-spoken transaction identifier with a computer transaction identifier, as recited in claim 1 (as noted above, the Examiner does not address the features recited in claim 27), and

user-spoken transaction identifier to a computer generated transaction identifier, as recited in

these sections of Fromm do not disclose or suggest a voice browser configured to compare a

claim 27.

The Abstract of Fromm is reproduced above. This section of Fromm discloses a voice verification unit comparing a present voice sample to a prestored voice print. This section of Fromm in no way discloses or suggests a voice browser configured to compare a user-spoken transaction identifier to a computer generated transaction identifier, as recited in claim 27.

Fromm does not disclose or suggest that the present voice sample is a user-spoken transaction identifier. In fact, this section of Fromm does not disclose or suggest a transaction identifier, but merely the comparison of a voice sample to a voice print. Moreover, Fromm does not disclose or suggest that the voice verification unit is a voice browser.

Col. 1, line 55, to col. 2, line 2, of <u>Fromm</u> is reproduced above. This section of <u>Fromm</u> discloses that a voice verification unit uses a stored voice print to identify a user. This section of <u>Fromm</u> in no way discloses or suggests a voice browser configured to compare a user-spoken transaction identifier to a computer generated transaction identifier, as recited in claim 27.

<u>Fromm</u> does not disclose or suggest that the few words that the user is asked to speak is a user-spoken transaction identifier. In fact, this section of <u>Fromm</u> does not disclose or suggest a transaction identifier. Moreover, this section of <u>Fromm</u> does not disclose or suggest that the

voice verification unit is a voice browser.

At col. 3, lines 1-52, <u>Fromm</u> discloses that a voice verification unit 103 obtains a present voice sample from a user by prompting the user to speak particular words, such as the user's password. This section of <u>Fromm</u> in no way discloses or suggests a voice browser configured to compare a user-spoken transaction identifier to a computer generated transaction identifier, as recited in claim 27. Moreover, this section of <u>Fromm</u> does not disclose or suggest that voice verification unit 103 is a voice browser.

Col. 4, lines 26-49, of <u>Fromm</u> is reproduced above. This section of <u>Fromm</u> discloses a transaction identifier (ID) that is used as part of the voice verification process. More specifically, <u>Fromm</u> discloses that the transaction ID is used to pair the voice sample entered at the time of the transaction with the prestored voice sample (see col. 4, lines 7-10). This section of <u>Fromm</u> in no way discloses or suggests a voice browser configured to compare a user-spoken transaction identifier to a computer generated transaction identifier, as recited in claim 27.

For at least the foregoing reasons and for the reasons given above with respect to claim 1, Appellants submit that the rejection of claim 27 under 35 U.S.C. § 103(a) based on <u>Hoffman et</u> al. and Fromm is improper. Accordingly, Appellants request that the rejection be reversed.

Claims 28 and 32-62 depend from claim 27. Therefore, these claims are patentable over Hoffman et al. and Fromm for at least the reasons given above with respect to claim 27.

10. Claim 29.

Claim 29 depends from claim 27. Therefore, claim 29 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 27. Moreover, claim 29 recites an additional feature that is not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

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Claim 29 recites that the voice recognition unit recognizes both spoken input and DTMF input. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 29.

Further, <u>Hoffman et al.</u> and <u>Fromm</u>, whether taken alone or in any reasonable combination, do not disclose or suggest a voice recognition unit that recognizes both spoken input and DTMF input. <u>Hoffman et al.</u> does not disclose or suggest a voice recognition unit. <u>Fromm</u> discloses a voice verification unit 103, but does not disclose or suggest that voice verification unit 103 recognizes both spoken input and DTMF input, as recited in claim 29.

For at least the foregoing reasons, Appellants submit that the rejection of claim 29 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

11. Claim 30.

Claim 30 depends from claim 27. Therefore, claim 30 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 27. Moreover, claim 30 recites an additional feature that is not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 30 recites a telephony interface unit coupled to the voice recognition unit, where the telephony interface unit is configured to convert signals carried by the network into signals having a correct format and amplitude. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 30.

Further, <u>Hoffman et al.</u> and <u>Fromm</u>, whether taken alone or in any reasonable combination, do not disclose or suggest anything similar to a telephony interface unit coupled to

the a voice recognition unit, the telephony interface unit being configured to convert signals carried by the network into signals having a correct format and amplitude, as recited in claim 30.

For at least the foregoing reasons, Appellants submit that the rejection of claim 30 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

12. Claim 31.

Claim 31 depends from claim 27. Therefore, claim 31 is patentable over <u>Hoffman et al.</u> and <u>Fromm</u> for at least the reasons given above with respect to claim 27. Moreover, claim 31 recites additional features that are not disclosed or suggested by <u>Hoffman et al.</u> and <u>Fromm</u>.

Claim 31 recites that the voice browser further comprises a voice menu system, where the voice menu system includes a voice menu option library having stored therein at least one voice menu option; a user interface transmitter configured to transmit the at least one voice menu option to the user, the user interface transmitter including a synthesized speech unit for generating the at least one voice menu option, and a digitized audio unit for generating user-audible signaling tones; and a user interface receiver configured to recognize a plurality of user-spoken menu selections provided by the user in response to the at least one voice menu option. The Examiner does not address these features in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 31.

Further, <u>Hoffman et al.</u> and <u>Fromm</u> in no way relate to recognizing user-spoken menu selections. Therefore, <u>Hoffman et al.</u> and <u>Fromm</u>, whether taken alone or in any reasonable combination, cannot disclose or suggest a voice browser that includes a voice menu system, where the voice menu system includes a voice menu option library having stored therein at least

one voice menu option; a user interface transmitter configured to transmit the at least one voice menu option to the user, the user interface transmitter including a synthesized speech unit for generating the at least one voice menu option, and a digitized audio unit for generating user-audible signaling tones; and a user interface receiver configured to recognize a plurality of user-spoken menu selections provided by the user in response to the at least one voice menu option, as recited in claim 31.

For at least the foregoing reasons, Appellants submit that the rejection of claim 31 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

13. Claims 65-68.

Independent claim 65 is directed to a computerized method for controlling web-site navigation. The method includes providing an authentication system including a voice recognition unit and a session correlator, where the voice recognition unit has access to a pre-registered voice print of the user, whereby the authentication system is coupled to a user computer and a web-site during the computerized method; conducting a transaction between the user computer and the web-site, where the web-site transmits a transaction identifier to the user computer and the authentication system in response to the transaction; receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print; transmitting an authentication message to the web-site if the user-spoken transaction identifier matches the voice

print; receiving at least one user-spoken command for controlling web-site navigation, where the authentication system is programmed to convert the at least one user-spoken command into at least one computer-readable command; and transmitting the at least one computer-readable command to the web-site, where the at least one computer-readable command is executed by the web-site, whereby the user controls web-site navigation of the web-site by the at least one user-spoken command. Hoffman et al. and Fromm do not disclose or suggest this combination of features.

The Examiner does not specifically address this claim in the final Office Action. Instead, the Examiner addresses the features recited in claim 1 (see pages 2-4 of the final Office Action). Claim 1, however, does not recite many of the features recited above with respect to claim 65. Since the Examiner does not specifically address the above features of claim 65, a *prima facie* case of obviousness has not been established with respect to claim 65.

Nonetheless, Appellants submit that <u>Hoffman et al.</u> and <u>Fromm</u>, whether taken alone or in any reasonable combination, do not disclose or suggest receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print, as recited in claim 65. The Examiner appears to admit that <u>Hoffman et al.</u> does not disclose comparing a user-spoken transaction identifier with a computer transaction identifier, as recited in claim 1 (as noted above, the Examiner does not address the features recited in claim 65), and relies on <u>Fromm</u> for allegedly disclosing "a technique for verifying a user's voice prior or the user's identity by use of a voice print before allowing the user to engage in commercial

transactions" and points to the Abstract, col. 1, lines 55-67, col. 3, lines 1-52, and col. 4, lines 26-49, of Fromm for support (final Office Action, pp. 3 and 5). Appellants respectfully submit that these sections of Fromm do not disclose or suggest receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print, as recited in claim 65.

The Abstract of Fromm is reproduced above. This section of Fromm discloses a voice verification unit comparing a present voice sample to a prestored voice print. This section of Fromm in no way discloses or suggests receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print, as recited in claim 65.

Fromm does not disclose or suggest that the present voice sample is a user-spoken transaction identifier. In fact, this section of Fromm does not disclose or suggest a transaction identifier, but merely the comparison of a voice sample to a voice print.

Col. 1, line 55, to col. 2, line 2, of <u>Fromm</u> is reproduced above. This section of <u>Fromm</u> discloses that a voice verification unit uses a stored voice print to identify a user. This section of <u>Fromm</u> in no way discloses or suggests receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print, as recited in claim 65.

<u>Fromm</u> does not disclose or suggest that the few words that the user is asked to speak is a user-spoken transaction identifier. Instead, <u>Fromm</u> discloses that these few words are used as a voice sample for the user to compare to a stored voice print of the user (see col. 3, lines 48-52).

At col. 3, lines 1-52, <u>Fromm</u> discloses that a voice verification unit 103 obtains a present voice sample from a user by prompting the user to speak particular words, such as the user's password. This section of <u>Fromm</u> in no way discloses or suggests receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print, as recited in claim 65. <u>Fromm</u> does not disclose or suggest that the spoken words are a transaction identifier. As set forth above, <u>Fromm</u> discloses comparing this voice sample to a stored voice print of the user to verify the user (see col. 3, lines 48-52).

Col. 4, lines 26-49, of <u>Fromm</u> is reproduced above. This section of <u>Fromm</u> discloses a transaction identifier (ID) that is used as part of the voice verification process. More specifically, <u>Fromm</u> discloses that the transaction ID is used to pair the voice sample entered at the time of the transaction with the prestored voice sample (see col. 4, lines 7-10). This section of <u>Fromm</u> in no way discloses or suggests receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, where the authentication system is programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print, as recited in claim 65.

<u>Hoffman et al.</u> and <u>Fromm</u> do not further disclose or suggest receiving at least one userspoken command for controlling web-site navigation, where the authentication system is

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programmed to convert the at least one user-spoken command into at least one computer-readable command, as also recited in claim 65. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 65.

Nonetheless, <u>Hoffman et al.</u> and <u>Fromm</u> in no way relate to controlling web-site navigation. Therefore, <u>Hoffman et al.</u> and <u>Fromm</u> cannot disclose or suggest receiving at least one user-spoken command for controlling web-site navigation, where the authentication system is programmed to convert the at least one user-spoken command into at least one computer-readable command, as recited in claim 65.

Since Hoffman et al. and Fromm do not disclose or suggest receiving at least one user-spoken command for controlling web-site navigation, where the authentication system is programmed to convert the at least one user-spoken command into at least one computer-readable command, Hoffman et al. and Fromm cannot disclose or suggest transmitting the at least one computer-readable command to the web-site, where the at least one computer-readable command is executed by the web-site, whereby the user controls web-site navigation of the web-site by the at least one user-spoken command, as also recited in claim 65. The Examiner does not address this feature in the final Office Action. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 65.

For at least the foregoing reasons and for the reasons given above with respect to claim 1, Appellants submit that the rejection of claim 65 under 35 U.S.C. § 103(a) based on <u>Hoffman et al.</u> and <u>Fromm</u> is improper. Accordingly, Appellants request that the rejection be reversed.

Claims 66-68 depend from claim 65. Therefore, these claims are patentable over

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Hoffman et al. and Fromm for at least the reasons given above with respect to claim 65.

CONCLUSION VIII.

In view of the foregoing arguments, Appellants respectfully solicit the Honorable Board

to reverse the Examiner's rejections of claims 1-6 and 9-68 under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account No. 13-2491 and please credit any excess

fees to such deposit account.

Respectfully submitted,

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IX. CLAIM APPENDIX

1. A computerized method for authenticating an electronic transaction between a user and a computer, the computer being configured to conduct electronic transactions, the method comprising:

receiving a computer-generated transaction identifier from the computer via an electronic data link;

receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection;

comparing the user-spoken transaction identifier with the computer transaction identifier;

comparing the user-spoken verification identifier with a voice print of the user; and

transmitting an authentication message to the computer if the user-spoken transaction identifier matches the computer-generated transaction identifier and if the user-spoken verification identifier matches the voice print.

- 2. The method of claim 1, wherein the computer transaction identifier is generated by the computer in response to the electronic transaction conducted between the user and the computer.
- 3. The method of claim 1, further comprising the step of providing the user voice print and user payment information prior to the electronic transaction.

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4. The method of claim 3, wherein the user voice print is provided by the user by

providing a spoken telephone number to a voice recognition unit.

5. The method of claim 3, wherein the user voice print is provided by the user by

providing a spoken user name to a voice recognition unit.

6. The method of claim 3, wherein the user payment information includes a credit

card number and an associated credit card expiration date.

7. The method of claim 1, wherein the step of receiving a user-spoken transaction

identifier and the step of receiving a user-spoken verification identifier are performed within a

predetermined time from completing the electronic transaction.

8. The method of claim 7, wherein the predetermined time is about five minutes.

9. The method of claim 1, wherein the electronic data link includes the Internet.

10. The method of claim 1, wherein the electronic data link includes a private

network.

11. The method of claim 1, wherein the computer is a system component of a

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financial institution.

12. The method of claim 11, wherein the financial institution is a bank.

13. The method of claim 12, wherein the user conducts the electronic transaction

using an ATM machine.

14. The method of claim 12, wherein the user conducts the electronic transaction by

communicating with a bank teller.

15. The method of claim 1, wherein the user conducts the electronic transaction using

a personal computer.

16. The method of claim 1, wherein the user conducts the electronic transaction using

a wireless device.

17. The method of claim 1, wherein the user conducts the electronic transaction using

a hand-held device.

18. The method of claim 1, wherein the computer is a system component of an

Internet web-site.

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19. The method of claim 18, further comprising:

receiving at least one user-spoken command for controlling web-site navigation, the at least one user-spoken command being transmitted by the user via a telephonic voice connection;

converting the at least one user-spoken command into at least one computer readable command;

transmitting the at least one computer readable command to the computer; and executing the at least one computer readable command, using the computer, whereby the user controls web-site navigation of the Internet web-site by voice command via the telephonic voice connection.

- 20. The method of claim 19, wherein the user is prompted by a voice menu system to respond to voice menu options when transmitting the at least one user-spoken command.
 - 21. The method of claim 1, further comprising:

providing at least one voice menu option to the user;

processing at least one user-spoken response to the at least one voice menu option, whereby the at least one user-spoken response is transformed into at least one computer-readable response;

transmitting the at least one computer-readable response to the computer; and executing the at least one computer response, using the computer, whereby the user controls the computer by voice command.

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22. The method of claim 1, wherein the user-spoken transaction identifier and the

user-spoken verification identifier are transmitted by a telephonic voice connection.

23. The method of claim 1, wherein the electronic transaction includes an on-line

purchase of goods or services.

24. The method of claim 1, wherein the electronic transaction includes a banking

transaction.

25. The method of claim 1, wherein the electronic transaction includes downloading

music files.

26. The method of claim 1, wherein the electronic transaction includes a point-of-sale

transaction.

27. A system for authenticating an electronic transaction between a first user-operated

device and a computer, the computer being configured to conduct electronic transactions, the

system comprising:

a voice browser configured to receive and process user-spoken information from a

second user-operated device, the voice browser being programmed to compare a user-spoken

transaction identifier to a computer generated transaction identifier, and to compare a user-

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spoken verification identifier to a voice print of the user; and

a session correlator coupled to the voice browser, the session correlator being configured to transmit an authentication message to the computer if the user-spoken transaction identifier matches the computer transaction identifier, and if the user-spoken verification identifier matches the voice print.

28. The system of claim 27, wherein the voice browser further comprises:

a voice recognition unit coupled to the second user-operated device via a network, the voice recognition unit being configured to recognize audible tones transmitted over the network; and

a database coupled to the voice recognition unit, the database being configured to store the voice print of the user and payment information associated with the voice print.

- 29. The system of claim 28, wherein the voice recognition unit recognizes both spoken input and DTMF input.
- 30. The system of claim 28, further comprising a telephony interface unit coupled to the voice recognition unit, the telephony interface unit being configured to convert signals carried by the network into signals having a correct format and amplitude.
- 31. The system of claim 27, wherein the voice browser further comprises a voice menu system, the voice menu system comprising:

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a voice menu option library having stored therein at least one voice menu option;

a user interface transmitter configured to transmit the at least one voice menu

option to the user, the user interface transmitter including a synthesized speech unit for

generating the at least one voice menu option, and a digitized audio unit for generating user-

audible signaling tones; and

a user interface receiver configured to recognize a plurality of user-spoken menu

selections provided by the user in response to the at least one voice menu option.

32. The system of claim 27, wherein the voice browser includes a digital signal

processor.

33. The system of claim 27, wherein the voice browser includes at least one software

module resident in an Internet backbone.

34. The system of claim 27, wherein the voice browser includes at least one software

module resident in a telecommunications switch.

35. The system of claim 27, wherein the voice browser includes at least one software

module resident in a computer disposed in a network data center.

36. The system of claim 27, wherein the voice browser includes at least one software

module resident in a computer disposed in a customer premise equipment.

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37. The system of claim 27, wherein the voice browser includes at least one software

module resident in a computer disposed in an intranet.

38. The system of claim 27, wherein the session correlator includes at least one

software module resident in an Internet backbone.

39. The system of claim 27, wherein the session correlator includes at least one

software module resident in a telecommunications switch.

40. The system of claim 27, wherein the session correlator includes at least one

software module resident in a computer disposed in a network data center.

41. The system of claim 27, wherein the session correlator includes at least one

software module resident in a computer disposed in a customer premise equipment.

42. The system of claim 27, wherein the session correlator includes at least one

software module resident in a computer disposed in an intranet.

43. The system of claim 27, wherein the second user-operated device includes a

microphone.

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44. The system of claim 27, wherein the second user-operated device includes a telephone set.

- 45. The system of claim 44, wherein the telephone set is a wireless telephone.
- 46. The system of claim 45, wherein the wireless telephone is configured to use a wireless access protocol.
- 47. The system of claim 27, wherein the computer transaction identifier is generated by the computer in response to the electronic transaction conducted between the user and the computer.
 - 48. The system of claim 27, wherein the electronic data link includes the Internet.
- 49. The system of claim 27, wherein the electronic data link includes a private network.
- 50. The system of claim 27, wherein the computer is a system component of a financial institution.
 - 51. The system of claim 50, wherein the financial institution is a bank.

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52. The system of claim 51, wherein the first user-operated device includes an ATM

machine.

53. The system of claim 51, wherein the user conducts the electronic transaction by

communicating with a bank teller.

54. The system of claim 27, wherein the first user-operated device includes a personal

computer.

55. The system of claim 27, wherein the first user-operated device includes a wireless

device.

56. The system of claim 27, wherein the first user-operated device includes a hand-

held device.

57. The system of claim 27, wherein the computer is a system component of an

Internet web-site.

58. The system of claim 27, further comprising:

a user authentication input unit coupled to the first user-operated device and the

session correlator, the user authentication unit being configured to accept a user name and a user

password from the user;

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a database coupled to the user authentication input unit, the database being

configured to store an authentic user name and an authentic user password; and

a user authenticator coupled to the user authentication input unit, the database, and

the session correlator, the user authenticator being programmed to compare the user name to the

authentic user name, and to compare the user password to the authentic user password, whereby

the user authenticator provides the session correlator with a transaction denial message if the user

name does not match the authentic user name, or the user password does not match the authentic

user password.

59. The system of claim 27, wherein the electronic transaction includes an on-line

purchase of goods or services.

60. The system of claim 27, wherein the electronic transaction includes a banking

transaction.

The system of claim 27, wherein the electronic transaction includes downloading

music files.

61.

62.

The system of claim 27, wherein the electronic transaction includes a point-of-sale

transaction.

63. A computerized voice verification method for authenticating an electronic

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transaction between a user and a computer, the computer being configured to conduct electronic transactions, the method comprising:

enrolling the user in a voice verification system, whereby the user provides the system with a user voice print;

performing the electronic transaction;

verification identifier matches the voice print.

receiving a transaction identifier from the computer via an electronic data link in response to performing the electronic transaction;

receiving a user-spoken transaction identifier and a user-spoken verification identifier transmitted by the user via a voice connection;

comparing the user-spoken transaction identifier with the computer transaction identifier and the user-spoken verification identifier with a voice print of the user; and transmitting an authentication message to the computer if the user-spoken transaction identifier matches the computer transaction identifier, and if the user-spoken

- 64. The method of claim 63, wherein a transaction denied message is transmitted to the computer if the user-spoken transaction identifier does not match the computer transaction identifier, or if the user-spoken verification identifier does not match the voice print.
- 65. A computerized method for controlling web-site navigation, the method comprising:

providing an authentication system including a voice recognition unit and a

session correlator, the voice recognition unit having access to a pre-registered voice print of the user, whereby the authentication system is coupled to a user computer and a web-site during the computerized method;

conducting a transaction between the user computer and the web-site, the web-site transmitting a transaction identifier to the user computer and the authentication system in response to the transaction;

receiving a user-spoken transaction identifier and a user-spoken verification identifier via a telephonic connection, the authentication system being programmed to compare the user-spoken transaction identifier to the transaction identifier and the user-spoken verification identifier to the pre-registered voice print;

transmitting an authentication message to the web-site if the user-spoken transaction identifier matches the transaction identifier and if the user-spoken verification identifier matches the voice print;

receiving at least one user-spoken command for controlling web-site navigation, the authentication system being programmed to convert the at least one user-spoken command into at least one computer-readable command; and

transmitting the at least one computer-readable command to the web-site, the at least one computer-readable command being executed by the web-site, whereby the user controls web-site navigation of the web-site by the at least one user-spoken command.

66. The method of claim 65, wherein the at least one user-spoken command includes a plurality of user-spoken commands.

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67. The method of claim 65, wherein the plurality of user-spoken commands are transmitted by the user in response to a plurality of voice menu options provided by the authentication unit.

68. The method of claim 65, wherein a web navigation is denied message is transmitted to the computer if the user-spoken transaction identifier does not match the computer transaction identifier, or if the user-spoken verification identifier does not match the voice print.

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X. <u>EVIDENCE APPENDIX</u>

None.

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XI. RELATED PROCEEDINGS APPENDIX

None.